## (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 22 September 2005 (22.09.2005)

PCT

## (10) International Publication Number WO 2005/087272 A2

A61K 49/04, (51) International Patent Classification<sup>7</sup>: A61P 43/00

(21) International Application Number:

PCT/US2005/008389

(22) International Filing Date: 11 March 2005 (11.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/552,240 11 March 2004 (11.03.2004)

- (71) Applicant (for all designated States except US): MALLINCKRODT INC. [US/US]; 675 McDonnell Boulevard, P.O. Box 5840, St. Louis, Missouri 63134 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): PERIASAMY, Muthunadar, P. [US/US]; 14640 Big Timber Lake, Chesterfield, Missouri 63017 (US). DOTY, Brian, D. [US/US]; 407 Wyatt Drive, St. Peters, Missouri 63376 (US).
- (74) Agents: GOETZ, Kenneth, D. et al.; Mallinckrodt Inc., 675 McDonnell Boulevard, P.O. Box 5840, St. Louis, Missouri 63134 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

## (54) Title: LOW OSMOLAR X-RAY CONTRAST MEDIA FORMULATIONS

(57) Abstract: The present invention generally relates to nonionic x-ray contrast media formulations, radiological compositions containing such agents and methods for x-ray visualization utilizing such compositions. The invention especially relates to injectable radiological compositions for x-ray visualization comprising a pharmaceutically acceptable vehicle and a mixture of a monomer, being a triiodo-substituted benzene nucleus, and a dimer, being two linked triiodo-substituted benzene nuclei, such that the mixture demonstrates favorable properties.